

# Hitachi Develops Streaming-Optimized Storage Appliance

March 13 2007

---

Hitachi, Ltd. today announced that it has succeeded in the implementation of a prototype streaming storage appliance optimized for Video-on-Demand (VoD) services, designed to be used with Microsoft Windows Media Services 9 Series servers.

This prototype storage appliance, which includes the Hitachi streaming-optimized kernel and innovative streaming engine software, has the ability to execute streaming video delivery for VoD services with a Windows Media server. Hitachi compared the video delivery performance of a Windows Media server in a simulated environment for two configurations: a server attached to the Hitachi streaming-optimized storage appliance and a server attached to conventional storage. Hitachi's researchers found that the configuration with the Hitachi streaming-optimized storage appliance was able to deliver more than three times as many streams as the latter configuration.

The recent spread of broadband networks has enabled HD (high definition) video, such as movies, to be delivered over the Internet. To meet customer expectations, a high performance streaming server system that can concurrently store and deliver many HD quality video streams with assured quality is critical. In order to achieve such high performance delivery, VoD service providers have usually needed to add both servers and storage to their systems, increasing both equipment and management costs.

By embedding the Hitachi streaming-optimized kernel and streaming

engine software, video can be streamed directly from the storage appliance without passing through an external streaming server. As a result, scalability and performance can be increased for an existing streaming media server by simply adding a storage appliance. Furthermore, video stream delivery scalability can be realized linearly by simply adding multiple storage appliances to the original streaming media server, contributing to reduced server equipment and management costs.

The Hitachi streaming-optimized storage appliance is designed to be compatible with Windows Media Services 9 Series, a widely adopted streaming server. Video delivery from Windows Media servers can be divided into two main processes: administration (authentication, authorization, playlist parsing, logging, etc.), and streaming. With the Hitachi streaming-optimized storage appliance, the Hitachi appliance provides the streaming engine, while all the administration is handled by the Windows Media server. By offloading the streaming to Hitachi streaming-optimized storage appliances, video stream throughput can be increased more than three times per unit, adding clear value for Windows Media solutions.

Source: Hitachi

Citation: Hitachi Develops Streaming-Optimized Storage Appliance (2007, March 13) retrieved 25 April 2024 from

<https://phys.org/news/2007-03-hitachi-streaming-optimized-storage-appliance.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.